ART. XXIX.—*A Handbook of Post-mortem Examinations and of Morbid Anatomy.* By FRANCIS DELAFIELD, M.D., Curator to Bellevue Hospital, etc. 8vo. pp. 368. New York: Wm. Wood & Co., 1872.

WE are informed in the preface to this neat volume that it has been written as a guide for "those persons who may be called upon to perform post-mortem examinations. To most physicians this call is only an occasional one, so that they may feel the need of some handbook to which they may refer."

The book is divided into four parts. The first is devoted to the examination of the adult and newly born. The latter is an original subject to manuals of this kind, and makes a valuable addition thereto. The second part is the most voluminous, occupying the greater portion of the book, and is devoted to the morbid anatomy of the separate organs. The lesions of general disease, the effects of poisoning, and of violent death form the third part; while the fourth is devoted to an outline of the modern classification of tumours. The section upon the method of making post-mortem examinations has upon the whole failed to meet our expectations. The young practitioner, when required for the first time to dissect the visceral cavities, is brought face to face with a problem of which little or nothing has been said during his pupilage, and the dissecting room afforded him no opportunities of observation worthy of the name. The shrunken, altered tissues, with the arteries, it may be, filled with plaster, give a very inadequate idea of the parts when seen in a fresh condition. He learns no rules of operation, and would naturally expect to find in a handbook, such as the one before us, the guide he needs. He has a right to insist that an autopsy should be conducted with the same eye to method as on the living subject, and to find, in books handed him for the purpose, fixed and detailed directions for each manœuvre. A glance at our author's language shows that he has failed to do this satisfactorily. Thus, under his remarks upon the examination of the brain, he says:—

"The two halves of the cerebrum are to be gently separated until the superior surface of the corpus callosum is exposed. An incision is made through the junction of the corpus callosum and cerebrum cutting outward and downward into each lateral ventricle . . . The incision thus made through the roof of each ventricle is prolonged backward and forward in the direction of the cornua, until the entire cavity of each lateral ventricle is exposed. A long incision outward and downward is then made into each half of the cerebrum, from the outer edge of the lateral ventricle, nearly to the pia mater. A second incision is then made from this cut surface outward, and this is repeated until the cerebrum is divided into a number of long prismatic-shaped pieces held together by the pia mater. The velum interpositum is then dissected up, and the fourth ventricle opened. To complete the examination cross sections are made through all the large ganglia, the medulla, and the cerebellum. Care must be taken not to overlook small clots in the medulla oblongata."

This is defective we hold in omitting to mention that the brain when removed should be supported at the sides to prevent the outward strain lacerating the deep structures. The middle commissure of the third ventricle can in this way be easily torn, and in softened conditions of the brain other parts may suffer. It is also defective in not insisting upon the measurement of the fluid found in ventricles, and in the general directions of dividing the brain. For those given we would suggest something like the following: The incision into the lateral ventricle should be made not through the point of junction of corpus callosum with the cerebrum, but through the tissue of the cerebrum itself. Indeed, the best incision, though one requiring some skill to perform it, is a vertical one made from the vertex of the brain about six lines to the outer side of the great longitudinal fissure. The lateral sinus being opened a syringe which is furnished with a long nozzle is used to withdraw the fluid, which should be carefully examined and measured. The lateral ventricle of the other side should be treated in the same manner. A long narrow knife is now passed through the foramen of Monro, and the corpus callosum and fornix at that point divided. These parts are now turned back to display the cavity of the third ventricle, which is thus unroofed, while the striated bodies and optic thalami are displayed along their entire lengths. The velum and the pineal gland are next examined, and the greatest care taken not to injure the latter body, which is frequently endangered by incautious handling of the velal tissue. A director is now passed from the third to the fourth ventricles—and the superincumbent parts divided. The hemispheres of the cerebrum may be next removed, saving the island of Reil from incision, which naturally belongs to the striated body of which it is a convolution. The examination is completed by making sections of the medulla, pons, optic thalami and striated bodies preferably in longitudinal rather than in transverse directions, since the former preserve relations, the latter destroy them.

Under the head of the thorax our author gives the following directions for opening the chest: "With a costatome or strong knife the costal cartilages are divided close to the ribs, the clavicles are disarticulated from the sternum, and the latter removed, taking care not to wound the large veins." This is about as definite as the following "rule" for amputation: Remove the affected limb at the point of selection and ligate the vessels; a correct rule enough but not a very useful one. Every one familiar with post-mortems knows that it requires a skilful hand to disarticulate the sternal end of the clavicle neatly. Attempts at its performance are chiefly responsible for the nicked and pointless knives of a hospital post-mortem case. The division of the first inter-costal cartilage by an oblique incision from below upwards and inwards is an aid to its easy performance, as it allows the knife to open the capsule at the lower edge of the sternal facet. Who has not seen the innominate veins opened by a bungling effort at severing this articulation and the subsequent smearing of the pleural cavities, disguising the appearances the observer is seeking, staining the serum or pus that may be present, and misleading him in his conclusion of the degree of venous stasis not only within the head but thorax and abdomen as well? Nor is it always necessary to effect the disarticulation. In young adults, and sometimes in older subjects, the sternum can be divided transversely about the line of the middle of the second costal cartilage.

We heartily commend the examination of the abdomen before removing the thoracic viscera, but are surprised that no directions are given to describe the organs of both cavities *in situ* before disturbing them. Indeed, in performing autopsies in private life it is well to avoid removing organs from the body as much as possible. With the exercise of a little care many of the viscera can be thoroughly examined, and portions removed for minute study, without taking the organs themselves from the body. We would feel inclined to supplement our author's remark that each lung is to be lifted up in turn, "the vessels, etc., at its base divided, and the organ removed" by saying—provided it be thought necessary to open the bronchi along their entire length, or when it is desired to preserve the lung as a specimen. But if the object be to examine the general appearance of the parenchyma of the lung as in pneumonia and phthisis, do not disturb the root of the lung, but, using it as a point of attachment, raise the lung from its bed, and by inserting a towel or sponge in the pleural cavity the organ can be placed in a good light; held firmly in a convenient position for such measurements or incisions as may be thought necessary. Neither is it always requisite to remove the heart. The pericardium should be carefully opened, a syringe used to remove the serum, and the measurements taken, the clots removed, etc., without disturbing its position. Should, however, it be deemed necessary to learn the weight of the organ, or the condition of the valves, it must be removed. In making the incision to display the semilunar valves of the pulmonary artery (which are here oddly termed the "pulmonary valves"), we have no directions given us, but are informed that the incision may be made to pass through one of the points of juncture "with a little care." Now the "little care" simply consists in inserting the finger from the right ventricle up along the pulmonary artery until the anterior of the three corpora Arantii is felt by the finger; a pair of blunt-pointed scissors may now be passed upward along the fingers and the valve divided at the "point of junction" with certainty.

In the event of disease involving the entire respiratory tract, or when the lesion is one requiring careful dissection, as, for example, in thoracic aneurism, the better plan after the parts have been carefully studied in position is to remove them as far up as the hyoid bone, and eviscerate the thoracic cavity together with the trachea and larynx. This can be easily effected by making a vertical incision through the skin along the median line of neck (the sternum having been previously removed), and the soft parts roughly dissected to the side. A second incision is now made above the hyoid bone through to the vertebral column. The trachea is now seized with one hand and pulled downward toward the thorax, the knife being held in the other to divide the great vessels at the root of the neck. Below this there is no obstruction to the easy separation of the base of the lungs, the trachea, and œsophagus, and the evulsion of the entire contents of the thorax out over the abdomen, where it is now held only by the pericardial attachment to the diaphragm, the aorta, and œsophagus. In this position the relations can be satisfactorily studied, and the organs may be restored if it be required; or, if it be permitted, can be removed by severing the attachments above mentioned.

Other examples might be cited showing, as we think, that too much knowledge of method on the part of the operator has been taken for granted, and too little of the author's knowledge has been given in the method presented.

There is a capital résumé of the varieties and position of thrombi, on p. 305, and of thrombosis of the portal vein on p. 187, and of a curious case of thrombosis of the superior mesenteric vein from perforation of the vessel by a fishbone, which had probably effected its escape from the stomach near the pyloric orifice. Another case of thrombosis of portal vein from a similar cause is detailed.

We would be doing injustice to this valuable addition to our literature to omit mention of the careful descriptions of the morbid condition of the viscera, as shown in the sections on ruptures and wounds of arteries, on peritonitis, and on the morbid conditions of the liver. H. A.

ART. XXX.—*The Microscope and Microscopical Technology, a Text-book for Physicians and Students.* By Dr. HEINRICH FREY, Professor of Medicine in Zurich. Translated and edited by GEORGE R. CUTTER, M.D., from the fourth and last German edition. 8vo. pp. 658. New York: Wm. Wood & Co., 1872.

THIS work of Prof. Frey, long favourably known by all students of German medical literature, will doubtless, in its English dress, be welcomed by the pro-